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**United States Patent** [19]

Kasner et al.

[11] Patent Number: **5,094,041**[45] Date of Patent: **Mar. 10, 1991**[54] **RIDGE CAP TYPES ROOF VENTILATOR**[75] Inventors: **Gary P. Kasner**, Eden Prairie; **Mark S. Stoll**, Excelsior, both of Minn.[73] Assignee: **Liberty Diversified Industries**, New Hope, Minn.[21] Appl. No.: **479,376**[22] Filed: **Feb. 13, 1990**[51] Int. Cl.<sup>5</sup> ..... **F24F 7/02**[52] U.S. Cl. .... **52/57; 52/199; 454/365**[58] Field of Search ..... **52/57, 199; 98/42.21, 98/42.22**[56] **References Cited****U.S. PATENT DOCUMENTS**

2,868,104	1/1959	Honholt	98/42
3,311,047	3/1967	Smith et al.	98/42
3,481,263	12/1969	Belden	98/42
3,625,134	12/1971	Smith	
4,545,291	10/1985	Kutsch	98/42.21
4,676,147	6/1987	Mankowski	98/42.21
4,803,813	2/1989	Fiterman	52/199
4,817,506	4/1989	Cashman	52/199
4,843,953	7/1989	Sells	98/42.21
4,876,950	4/1988	Rudeen	98/42.21

**OTHER PUBLICATIONS**

IPC printed application WO84/02970.

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[57] **ABSTRACT**

A ridge peak roof ventilator comprising a pair of vent parts disposed on opposing sides of an opening in a roof peak, and a top panel disposed above and connecting each of the vent parts. The vent parts may be of unitary construction, folded from interconnected panels, or assembled from individual layers of sheet material, and each forms a multiplicity of air passages through which air flows from the interior to the exterior of the roof ventilator. The top panel is constructed from double-faced corrugated plastic having a pair of planar plies and a convoluted intermediate ply. The underside of the top panel is routed along the centerline to form a concave recessed area, thereby cutting away a section of one planar ply and part of the intermediate ply to form oval-shaped openings. Each opening has side walls traversing concave arcuate paths between a maximum height adjacent the side edges of the recessed area and a minimum height along the centerline. The top panel will responsively fold along the centerline corresponding to the minimum heights of each of the side walls. Each vent part defines pockets serving as precipitation barriers, the pockets being formed by cutting an array of apertures into separate panels and folding or attaching those panels in parallel abutting contact with the apertures aligned. The top panel may also define one or more lines of apertures extending completely there-through. The roof ventilator may be shipped flat or folded into a compact bundle.

**15 Claims, 5 Drawing Sheets**